AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-34 (Canceled).

35. (New) A method for analyzing at least one deformable object in a suspension fluid, comprising the steps of:

generation of an electric positioning field and positioning of the object in a potential minimum of the positioning field;

generation of an electric deformation field so as to exert a deformation force on the object; and

detection of at least one property selected from the group consisting of dielectric, geometric and optical properties of the object,

wherein the positioning field is generated in a compartment of a fluidic microsystem, and the positioning of the object takes place in a contactless manner without electrode contact or in a freely suspended state.

36. (New) The method according to claim 35, wherein the positioning of the object takes place under an effect of negative dielectrophoresis or under an effect of positive dielectrophoresis.

37. (New) The method according to claim 35, wherein the generation of the deformation force takes place under an effect of negative dielectrophoresis or under an effect of positive dielectrophoresis.

38. (New) The method according to claim 35, wherein the detection takes place during or after the deformation of the object and accordingly comprises a determination of deformation or relaxation properties of the object .

39. (New) The method according to claim 35, wherein the positioning field is generated as a high-frequency field cage by a cage electrode arrangement.

40. (New) The method according to claim 39, wherein the high-frequency field cage is operated as a closed field cage with a punctiform potential minimum, in which the object rests.

41. (New) The method according to claim 39, wherein the high-frequency field cage is operated as an open field cage with a linear potential minimum, through which the object moves with the suspension fluid.

42. (New) The method according to claim 39, wherein the cage electrode arrangement is used to generate the deformation field.

43. (New) The method according to claim 39, wherein a separate deformation electrode arrangement is used to generate the deformation field.

44. (New) The method according to claim 35, wherein the deformation field is set for a duration of 1 ms to 500 ms.

45. (New) The method according to claim 35, wherein the generation of the deformation field takes place in a pulsed manner.

46. (New) The method according to claim 35, wherein the object is exposed to a treatment fluid before or during the generation of the deformation field.

47. (New) The method according to claim 35, further comprising a multiple measurement in which the steps of generation of the deformation field with the detection and the generation of the positioning field are carried out in an alternating manner a number of times one after the other.

48. (New) The method according to claim 47, wherein the multiple measurement is carried out for a duration of at least one second.

49. (New) The method according to claim 47, wherein at least one of the positioning field and the deformation field is adjusted or changed as a function of a result of the respectively preceding detection.

50. (New) The method according to claim 47, wherein at least one of the deformation field and the positioning field is adjusted a number of times in such a way that the object is in each case deformed in different directions.

51. (New) The method according to claim 35, wherein viscoelastic properties of the object are determined from the detected dielectric, geometric or optical properties.

52. (New) The method according to claim 35, wherein, prior to the positioning step, the object is selected from a sample which has been subjected to a dielectric lining-up operation.

53. (New) The method according to claim 35, wherein the object comprises at least one biological cell, cell group, cell constituent or synthetic particle.

54. (New) The method according to claim 53, wherein a distinction is made between normal and altered cells or between normal cells having different physiological properties as a function of the detected dielectric, geometric and/or optical properties.

55. (New) The method according to claim 53, wherein stem cells are identified as a function of the detected dielectric, geometric and/or optical properties.

56. (New) The method according to claim 53, wherein the dielectric, geometric or optical properties of the cell are detected as a function of at least one of the following parameters:

frequency of the positioning field,

frequency of the deformation field,

voltage of the positioning field,

voltage of the deformation field,

temperature of the suspension or treatment fluids,

material composition of the suspension or treatment fluids,

duration of the individual deformation, and

duration of a number of deformations.

57. (New) The method according to claim 53, wherein a measurement of cell pairs or cell aggregates and/or a separation of cell pairs takes place.

58. (New) The method according to claim 57, wherein the cell pairs or cell aggregates are brought together in the positioning field.

59. (New) A measuring apparatus for analyzing at least one object, said measuring apparatus comprising:

a fluidic microsystem having a compartment containing at least one electrode arrangement;

a detector device adapted to measure electric, geometric and/or optical properties of the object; and

a field forming device comprising at least one high-frequency generator, wherein the field forming device can be switched between an operating state in which a high-frequency positioning field is generated in the compartment by the at least one electrode arrangement and an operating state in which a deformation field is generated in an analysis area by the at least one electrode arrangement.

60. (New) The measuring apparatus according to claim 59, wherein the field forming device contains a switching device adapted to switch between the operating states.

61. (New) The measuring apparatus according to claim 59, wherein the detector device includes a microscope with a camera.

62. (New) The measuring apparatus according to claim 59, wherein the fluidic microsystem is equipped with a fluidic device for moving at least one of a suspension fluid and a treatment fluid through the analysis area.

63. (New) The measuring apparatus according to claim 59, wherein a control device is provided which is connected to the detector device and the switching device.

64. (New) The measuring apparatus according to claim 63, wherein the control device forms a control loop in which the positioning field and/or the deformation field can be adjusted or changed as a function of a result of the preceding detection.

65. (New) The measuring apparatus according to claim 59, wherein the electrode arrangement comprises electrodes with electrode tips, wherein the electrode tips of neighboring electrodes have boundaries running parallel at least in some sections.

66. (New) The measuring apparatus according to claim 65, wherein the boundaries are oriented parallel or perpendicular to a longitudinal direction of the compartment of the fluidic microsystem.

67. (New) The measuring apparatus according to claim 59, wherein the positioning field and the deformation field are switched on at the same time in the second operating state.

68. (New) A method of analyzing biological cells, said method comprising using a fluidic microsystem with a high-frequency field cage to analyze at least one of deformation and relaxation properties of the biological cells.